

December 20, 2000

Mr. Oliver D. Kingsley
President, Nuclear Generation Group
Commonwealth Edison Company
ATTN: Regulatory Services
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

SUBJECT: DRESDEN NUCLEAR GENERATING STATION - NRC INSPECTION REPORT
50-237/00-15(DRS); 50-249/00-15(DRS)

Dear Mr. Kingsley:

On November 28, 2000, the NRC completed a biennial inspection of the licensed operator requalification training program at the Dresden Nuclear Generating Station, Units 2 and 3. The enclosed report documents the inspection findings which were discussed on November 28, 2000, with Mr. Swafford and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

No findings of significance were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

O. Kingsley

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We will gladly discuss any questions you have concerning this inspection.

Sincerely,

/RA/

David E. Hills, Chief
Operations Branch
Division of Reactor Safety

Docket Nos. 50-237; 50-249
License Nos. DPR-19; DPR-25

Enclosures: 1. Inspection Report 50-237/00-15(DRS);
50-249/00-15(DRS)
2. List of Documents Reviewed

cc w/encl: D. Helwig, Senior Vice President, Nuclear Services
C. Crane, Senior Vice President, Nuclear Operations
H. Stanley, Vice President, Nuclear Operations
R. Krich, Vice President, Regulatory Services
DCD - Licensing
P. Swafford, Site Vice President
R. Fisher, Station Manager
D. Ambler, Regulatory Assurance Manager
M. Aguilar, Assistant Attorney General
State Liaison Officer
Chairman, Illinois Commerce Commission

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 - State Liaison Officer
 - Chairman, Illinois Commerce Commission

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-237; 50-249
License Nos: DPR-19; DPR-25

Report No: 50-237/00-15(DRS); 50-249/00-15(DRS)

Licensee: Commonwealth Edison Company

Facility: Dresden Nuclear Generating Station, Units 2 and 3

Location: 6500 N. Dresden Road
Morris, IL 60450

Dates: October 2-6, November 14-17 and November 27-28, 2000

Inspectors: A. M. Stone, Senior Operations Engineer
M. Bielby, Senior Operations Engineer

Approved by: David E. Hills, Chief
Operations Branch
Division of Reactor Safety

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

| Reactor Safety | Radiation Safety | Safeguards |
|---|---|---|
| <ul style="list-style-type: none">● Initiating Events● Mitigating Systems● Barrier Integrity● Emergency Preparedness | <ul style="list-style-type: none">● Occupational● Public | <ul style="list-style-type: none">● Physical Protection |

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.

SUMMARY OF FINDINGS

IR 05000237-00-15(DRS), IR 05000249-00-15(DRS), on 10/2-6/00, 11/14-17/00 and 11/27-28/00, Commonwealth Edison Company, Dresden Generating Station, Units 2 and 3. Licensed Operator Requalification Training.

The inspection was conducted by two regional senior operations specialists. There were no findings of significance identified during this inspection.

Report Details

1. REACTOR SAFETY

1R11 Licensed Operator Requalification

.1 Review of Operating History - Effectiveness of Operator Training

a. Inspection Scope

The inspectors reviewed the plant's operating history from January 1999 through October 2000, to assess whether the licensed operator requalification training program had addressed operator performance deficiencies noted in the plant. Specific documents reviewed are listed in Enclosure 2.

b. Findings

No findings of significance were identified.

.2 Requalification Examination Material

a. Inspection Scope

The inspectors reviewed the Year 2000 annual requalification operating and written examination material to evaluate the general quality, construction, operational validity, and difficulty level. The inspectors also verified that the examination material (1) adequately sampled the items stated in 10 CFR 55.41, 10 CFR 55.43, and 10 CFR Part 55.45; (2) adequately evaluated operator's knowledge of abnormal and emergency procedures; (3) incorporated probabilistic risk assessment insights; (4) was consistent with the Licensed Operator Requalification Training program two year sample plan; (5) incorporated system and component differences between Unit 2 and Unit 3; and (6) included previously identified operator performance deficiencies. The inspectors compared the comprehension level tested on selected written examinations and operating tests administered during week six of the cycle with the comprehension level tested on other examinations administered during this requalification cycle. The inspectors assessed the level of examination material duplication during the current year annual examination and with last year's annual examinations.

The inspectors also discussed various aspects of the examination development with members of the licensee's training staff. Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Findings

No findings of significance were identified.

.3 Requalification Examination Administration Practices

a. Inspection Scope

The inspectors observed the administration of the requalification operating test to assess the licensee's effectiveness in conducting the test and to assess the facility evaluators' ability to determine adequate performance using objective, measurable performance standards. The inspectors evaluated the performance of one operating shift crew during two dynamic simulator scenarios and nine job performance measures in parallel with the facility evaluators. The inspectors evaluated the training staff personnel administering the operating test, specifically observing techniques for job performance measure cuing and methodology to minimize undue operator stress and the potential for negative training. The inspectors verified that the facility evaluators effectively identified individuals and crews requiring remediation and that post-examination critiques were effective in pointing out strengths and weaknesses observed. The inspectors verified the tests were administered as planned and that errors in administration were appropriately corrected. The inspectors noted the performance of the simulator to support the examinations. The inspectors also reviewed the licensee's overall examination security program including the licensee's corrective actions associated with a compromised written examination.

The inspectors observed the performance of one crew in the control room to compare their performance with performance observed in the simulator on requalification examinations. The inspectors also discussed various aspects of the examination administration with members of the licensee's training and operations staffs.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Findings

No findings of significance were identified.

.4 Requalification Training Program Feedback Process

a. Inspection Scope

The inspectors assessed the methods and effectiveness of the licensee's processes for revising and maintaining its licensed operator continuing training program up to date, including the use of feedback from plant events and industry experience information. The inspectors interviewed licensee personnel (operators, instructors, training management, and operations management) and reviewed the applicable licensee's procedures. In addition, the inspectors reviewed Quality Assurance and Self-Assessment Audits.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Findings

No findings of significance were identified.

.5 Remedial Training Program

a. Inspection Scope

The inspectors assessed the adequacy and effectiveness of the remedial training conducted since the previous annual requalification examinations and the training planned for the current examination cycle to ensure that they addressed weaknesses in licensed operator or crew performance identified during training and plant operations. The inspectors reviewed remedial training procedures and individual remedial training plans, and interviewed licensee personnel (operators, instructors, and training management). In addition, the inspectors reviewed the current examination cycle remediation packages for the written and operating examination failures to ensure that remediation and subsequent re-evaluations were completed prior to returning individuals to licensed duties.

b. Findings

No findings of significance were identified.

.6 Conformance with Operator License Condition

a. Inspection Scope

The inspectors reviewed the licensee's program for maintaining active operator licenses and ensuring the medical fitness of its licensed operators. The inspectors evaluated the facility and individual operator licensees' conformance with the requirements of 10 CFR Part 55.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Findings

No findings of significance were identified.

40A6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. Swafford and other members of licensee management and staff at the conclusion of the site inspection on November 28, 2000. The licensee acknowledged the information and findings presented. No proprietary information was identified by the licensee.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

P. Swafford, Site Vice President
D. Ambler, Regulatory Assurance Manager
S. Butterfield, NRC Coordinator
R. Fisher, Station Manager
J. Heck, Operations Training
W. Lipscomb, Training Manager
M. Pacilio, Operations Manager
R. Stobert, Operations Training

NRC

D. Smith, Senior Resident Inspector

ITEMS OPENED, CLOSED AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents referenced and/or reviewed during the inspection, including documents prepared by others for the licensee. Inclusion on this list does not imply that NRC inspectors reviewed the documents in their entirety, but, rather that selected sections or portions of the documents were referenced and/or evaluated as part of the overall inspection effort. NRC acceptance of the documents or any portion thereof is not implied.

Review of Operating History - Effectiveness of Operator Training

Licensee Event Reports: 2-2000-002, 2-1999-001, 3-2000-003, 3-1999-001

Listing of General Descriptions of Condition Reports and Problem Identification Forms related to training for 1999 and 2000.

NRC Inspection Report 50-237/98005; 50-249/98005
NRC Inspection Report 50-237/98301; 50-249/98301
NRC Inspection Report 50-237/98019; 50-249/98019
NRC Inspection Report 50-237/98021; 50-249/98021
NRC Inspection Report 50-237/98030; 50-249/98030
NRC Inspection Report 50-237/99003; 50-249/99003
NRC Inspection Report 50-237/99008; 50-249/99008
NRC Inspection Report 50-237/99012; 50-249/99012
NRC Inspection Report 50-237/99018; 50-249/99018
NRC Inspection Report 50-237/99021; 50-249/99021
NRC Inspection Report 50-237/99023; 50-249/99023
NRC Inspection Report 50-237/20006; 50-249/20006
NRC Inspection Report 50-237/20007; 50-249/20007

Requalification Examination Material

NTAFT JLOR02, Revision 2, "Simulator Training Scenario Development Job Aid"
NTAFT JLOR04, Revision 1, "Examination Development Aid"
NTAFT JLOR03, Revision 2, "Job Performance Measure Development Job Aid"
CWPI-NSP-TQ-1-6, Revision 1, "Licensed Operator Requal Training Program"
TQ-AA-106, Revision 0, "Licensed Operator Requal Training Program"

Weeks #1-6 Cycle #1, 2000, NRC Requalification Written Examinations

Weeks #1-5, NRC Requalification Operating Tests

P0300-01, "Respond to a CRD Flow Control Valve Failure"

P0263-01, "Locally Pull ARI Fuses to Reset ATWS/ARI Circuit"

P6900-06, "Respond to a Failure of Unit 2(3) 234/48 vDC Power Supply"

P1100-03, "Line Up SBLC Test Tank for Alternate Water Injection"

S0500-10, "Perform Manual Scram Circuit Senro Test"

S6620-04, "Using the SBO to Re-energize a 4kV Bus"

S1000-02, "Shutdown the SDC System from the Cooling Mode of Operation"

S7500-02, "Shutdown the SBT System"

S GSEP-02, "Perform the Duties of the Acting Station Director"

OP Exam Scenario X, "Spurious ADS Valve Opening, Loss of Reactor Building 250 VDC MCC 2A/B, and Feedwater Rupture ATWS"
OP Exam Scenario B, "Unisolating a Main Steam Line, APRM Failure, and Drywell LOCA"
UFSAR Chapter 13.2, "Conduct of Operations - Training"
Technical Specification 6.3, "Unit Staff Qualifications"
Technical Specification 6.4, "Training"
Dresden's Probabilistic Risk Assessment

Requalification Examination Administration Practices

CWPI-NSP-TQ-2-1, Revision 2, "Examination Security and Administration"
CWPI-NSP-TQ-1-6, Revision 1, "Licensed Operator Requal Training Program"
TQ-AA-106, Revision 0, "Licensed Operator Requal Training Program"

Listing of Open Simulator Work Request

Condition Report D2000-06311, "Trend Identified with the Number of EAL's Misclassified During Training"
Condition Report D2000-04991, "Potential Exam Compromise During Material Development"
Training Request 00-1837, "Corrections to JPM S GSEP-02"

Requalification Training Program Feedback Process

LORT Curriculum Review Committee Meeting Agenda for November 15, 2000
PIT Session Notes (November 16, 2000)
Training Feedback Forms for 1999-2000: Post-Shift Critique
Training Feedback Forms 1999-2000: Classroom Instruction

Dresden LORT Self-Assessment Report, dated September 5-8, 2000
Dresden Training Department 4th Quarter, 1999 Self-Assessment Final Report
Dresden Training Department Focused Self-Assessment (Simulator Training), dated February 2000
NOA-12-99-OP03, Dresden Station Assessment Report, Nuclear Oversight Assessment, Operator Simulator Training, April 21, 1999

Remedial Training Program

CWPI-NSP-TQ-1-6, Section 6, Missed Training
CWPI-NSP-TQ-1-6, Section 7, Accelerated Requalification Programs

Conformance with Operator License Condition

UFSAR Chapter 13.1, "Conduct of Operations - Organizational Structure"
Technical Specification 6.2.B, "Unit Staff"

Condition Report D20000-00870, "Medical Information Not Forwarded to the NRC"
Condition Report D2000-06309, "Credit Taken for Maintaining an Active License with Center

Desk NSO Position”

OP-AA-11-104, Revision 1, Watchstanding Practices

OP-AA-101-701, Revision 1, NRC Active License Maintenance

Review of medical records for eleven licensed operators